

THE BRAIN OF RHINOCHIMAERA.

By BURT G. WILDER.

(Read April 23, 1908.)

Four years ago, to the small but very peculiar and ancient group of shark-like fishes known as Chimeroids, Holocephala and Chismopnea, Garman added a Japanese species, *Rhinochimaera pacifica*. His description of the brain was brief and the figures represented only the general form from the dorsum, venter and side. A well-preserved example recently obtained from Alan Owston of Yokohama enables me to confirm Garman's account as to the general Chimeroid character of the brain, especially the cerebellum and adjoining segments, and as to the extraordinary—probably unique—slenderness of the other regions, due not merely, as in Chimaera, to the elongation of the cerebral crura, but also to the pedunculate condition of the olfactory bulbs, whose tracts or crura equal the cerebral in length. The partial dissection of this brain discloses additional features, as shown upon the colored crayon diagram, viz., (1) The cerebral and olfactory cavities. (2) The complete circumscription of these cavities by walls of moderate thickness at the olfactory bulbs and parts of the cerebral hemispheres, but mostly thin and largely membranous. (3) The olfactory crura have thinner walls than in any brain known to me, and the proper nervous substance seems to be confined to their outer or lateral sides. (4) The roof of the undivided cerebral cavity is wholly membranous; likewise a narrow mesal zone of the floor, but the floors of the hemispheres are connected by a terma ("lamina terminalis") as described by me in *Chimaera* in 1877. (5) Each substantial wall of the cerebral cavity begins as a single broad band which divides into a ventral and a lateral portion as it approaches the hemisphere; this condition has not been observed by me in any other brain. (6) There was found no trace of the *Nervus terminalis* of Locy; nor has it been recognized in any other member of the group.

Even were our knowledge of structure, development and geologic records more complete, and even were there more substantial agreement as to the bearing of the facts upon the affinities, rank and succession of the forms concerned, a detailed description of this brain and a full discussion of the significance of its resemblances and peculiarities would be profitable before a comprehensive society like this only when, as urged by me in this hall three years ago, the concrete foundations of neurology are laid in the primary schools, and when no child reaches the age of ten without exposing for himself, drawing, dissecting and describing the brain of a shark.

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